

Page 1 of 1

All amounts are calculated in domestic currency.

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
Vendor ID \ Vendor Name VC-COP001 Thyssenkrupp Materials CA Ltd											
PO37472 CAD	1		M174R0.750	f	8/31/2017	8/23/2017	12.0000	\$6.37	0.0000	0	\$76.42
	No		17-4 round bar .750	f	12.0000	PLOU01		\$76.42	0.0000	0	
			m138344								
	2		M303R0.750	f	8/31/2017	8/23/2017	48.0000	\$3.54	0.0000	0	\$169.94
	No		303 Round Bar 0.750	f	48.0000	PLOU01		\$169.94	0.0000	0	
			m138344								
	3		M6061T6B00750X00	f	8/31/2017	8/23/2017	40.0000	\$11.10	0.0000	0	\$44.06
	No		.125	f	40.0000	PLOU01		\$44.06	0.0000	0	
		6061-T6 Bar .750 x .125									
		m138344									
8		71401-45			8/31/2017	8/23/2017	1.0000	\$0.00	0.0000	0	\$0.00
No		PROCUREMENT			1.0000	PLOU01		\$0.00	0.0000	0	
		QUALITY									
		CLAUSES									
		m138344									
Total Received Quantity: 101.0000											
Total Qty to Inspect (PO U/M): 0.0000											
Total Reject Quantity: 0.0000											
Total Receipt Value: \$290.41											
Total Balance Due Quantity: 0.0000											

B I L L O F L A D I N G

No: PEC 60379

Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

Ship Date 22Aug17 at 11:54 From PFW
Probill
Via VIM DELIVERY
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Ship To: (1)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
Tel: 613-632-9577 Fax: 613-632-1053

B I L L O F L A D I N G

1) Our Order PEC- 84421- 1 Your PO # 37472
STAINLESS STEEL ROUND BAR 17-4 STAINLESS
.750" DIA X 144.0000"

MTR

Heat Number 265874
Tag No 682977

Quantity 12 FT PCS 1 Wt LBS 18

2) Our Order PEC- 84421- 2 Your PO # 37472
STAINLESS STEEL ROUND BAR 303 STAINLESS
.750" DIA X 144.0000"

Heat Number 479E
Tag No 682978

Quantity 48 FT PCS 4 Wt LBS 74

3) Our Order PEC- 84421- 3 Your PO # 37472
ALUMINUM FLAT BAR 6061-T6511
.125" x .750" X 240.0000"

Heat Number 3B5358
Tag No 682979

Quantity 40 FT PCS 2 Wt LBS 5

TOTAL: Tags 3 PCS 7 LBS 97

Heat Number *** Chemical Analysis ***
265874
3B5358
479E

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR

Page: 1Continued

Sp 17-8-23.

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

B I L L O F L A D I N G

No: PEC 60379

Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

Ship Date 22Aug17 at 11:54 From PFW
Probill
Via VIM DELIVERY
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE

Ship To: (1)
DART AEROSPACE

B I L L O F L A D I N G

TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **
** REFERENCED ON IT **

TOTAL 2 BDLS GW. 120 LBS

*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA
CONCORD, ONT.* *** 9:00 AM TO 4:00 PM ***

**** TEL. 800-926-2600 ****

* WE STOCK STAINLESS STEEL *

* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
ADDED TO EVERY ORDER.***

***UNE SURCHARGE D'ENERGIE DE \$25.00

SERA AJOUTEE A CHAQUE COMMANDE.***

***POUR VOS BESOINS D'ACIER INOXYDABLE,

CONTACTEZ-NOUS. NOUS L'AVONS! TEL. 800-926-2600

SPR 8.23

Page: 2 Last

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

VOI/OST# 1017327981 T0001 TBS/OST TVH/HST # 140222024 BT0001

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL ROUND BAR 17-4 STAINLESS
.750" DIA X 144.0000"
PART NO.

PO/Rel 37472

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-060379-001

22Aug17

Signed by:

Pg 1/3



Acciaierie Valbruna S.p.A.

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
Telefono 0444.968211 - Fax 0444.963836
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4/37
Telefono 0471.924111 - Fax 0471.924497

CERTIFICATO DI COLLAUDO - ABNAHMEPRUEFEZEUGNIS - INSPECTION CERTIFICATE - CERTIFICAT DE RECEPTION

In conformità a: **EN 10204 (2004), 3.1**

Certificato nr. **MEST695635 / 2015 / 1**

Cliente / Besteller/Purchaser/Client
VALBRUNA CANADA LTD
8724 HOLGATE CRESCENT
L5T 5Z1 - MILTON, ONT L5T 5Z1 - CA

Stato di fornitura: **Hot rolled - COND. A Peeled**
Lieferzustand: **Reeled/Polished**
Delivery state:
Form de livrare:

Produttore:
Hersteller/Usine productrice
ACCIAIERIE VALBRUNA S.P.A.

Ordine nr: **411005034 Stock - Canada**
Bestell
Your order
Commande

Tipo di Elaborazione: **E+AOD**
Erzeugnisbezeichnung
Manufact process
Mode d'elaboration

Marchi di Fabbrica:
Zeichen des Unternehmens
Trade marks
Sigles de l'usine productrice



Conferma ordine nr: **E14011935**
WerkAuftrag/OrderRef. nr.

Qualità: **630**
Werkstoffe/Grades/Qualite

Punzone del Collaudatore:
Stempel des Werkstoffverständigen
Inspector's stamp/Stampin de l'assureur

MR

Avviso di Spedizione: **D-VI15014819**
Lieferanweisung/Packing list/V.L.

Marcia: **V174**
Markenbezeichnung
Brand / Marque

Punzonatura: **630**
Kennzeichnung
Marking
Marquage

SPECIFICHE:

Anforderungen / Requirements / Exigences

Note:

Auflagehinweise / Notes / Notes

VSI 2 630 A
AISI 630
AMS 2303 F.
AMS 5849 T S17400 A
ASME SA564 2013 S17400 A (0)
ASTM A370 2014.
ASTM A554 2013 S17400 A

(DISSECTION II PTA 2013 EDITION

Tolleranza: ASTM A484-16 TABLE 7

Tolerance/Abweichung der Toleranzen

Pos. nr. Pos. nr. Nr. de poste	Oggetto Description Produit description Design. de produit	Dimensioni - in Abmessung Dimension	Lunghezza - in Länge Length Longueur	Colata Gießerei Casting	Pezzi Stückzahl Pieces	Peso - LB Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lote nr.
0060	Round	0,7500	146/ 146	265874	5	2.152	426809241

TEST ALLO STATO DI FORNITURA

Test on delivery condition / Prüfung auf Lieferbereitem produkt / test a l'etat de fourniture / Prueba sobre el material así como entregado

TEST	Provetta / Probe Especimen / Échantillon Längs / Longitudinal Brinell / Brinell Vickers / Vickers Rockwell / Rockwell	Pos. Sagitt. P. Sagitt. Sagitt.	Snervamento Zugversuch Tensile Stress Limite d'élasticité	Snervamento Zugversuch Tensile Stress Limite d'élasticité	Resistenza Zugversuch Tensile Strength Résistance à la traction	Allungamento Zugversuch Elongation Allongement	Strizione Zugversuch Reduction of area Striction	Resistenza Knickversuch Tensile Value Résistance	Durezza Härte Hardness Dureté
Valori richiesti A-minded values / Required values Valeurs demandées	min max	-	-	-	-	-	-	-	363
A									340

TEST ALLO STATO DI FORNITURA

Test on delivery condition / Prüfung auf Lieferbereitem produkt / Test a l'etat de fourniture / Prueba sobre el material así como entregado

TEST	min	max
A Delta Ferrite		5,0
A Grain size for ASTM E112		1,0 %
A RATINGS FREQUENCY		5
A RATINGS SEVERITY		0
		1,10
		1,05
		0

Vicenza, 23/11/16

VCC006 - MEST951972

(Mod. MCEZ)

Il collaudatore di stabilimento / der Werkstoffverständige / Works inspector / L'agent d'usine

M. RIZZOTTO

Pagina - 1 di 3

**Acciaierie Valbruna S.p.A.**

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
Telefono 0444.968211 - Fax 0444.963836
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4/37
Telefono 0471.924111 - Fax 0471.924497

CERTIFICATO DI COLLAUDO - ABNAHMEPRUEFZEUGNIS - INSPECTION CERTIFICATE - CERTIFICAT DE RECEPTION

In conformità a : **EN 10204 (2004) , 3.1**
Nachfolgend to Sehn

Certificado nr. **MEST695635 / 2015 / 1**
Prüfung/TeestEssai

Cliente / Bestellen/Purchaser/Client
 VALBRUNA CANADA LTD
 8724 HOLGATE CRESCENT
 L5T 5Z1 - MILTON, ONT L5T 5Z1 - GA

Stato di forniture :	Hot rolled - COND. A Peeled
Lieferungsstand	Reeled/Polished
Delivery state	
État de livraison	

Produttore .
Handall s.r.l. - Usine produttrici
ACCIAIERIE VALBRUNA S.P.A.

Ordine nr 411005034 Stock - Canada

Tipo di Elaborazione: E+AOD
 Erstellungsprozess:
 Making process:
 Mode of elaboration:

Marchi di Fabbrica:
Zeichen des Laferwerkes
Tsada marko
Siclas de fuzina productrice

Conferma ordine nr. E14011935

Qualità: 630

Punzone del Collaudatore:
Stempel des Abkissachverständigen
Inspektor's stamp/Ingenieur de l'essayeur

Avviso di Spedizione: D-VI15014819
Lieferanten-Packung für B.L.

Marca: V174
Markenbezeichnung
Brand-Name

Punzonatur: 630
Kennzeichnung
Maring
Mafguso

Sample cond. H900

Tipo Trattamento	Temperatura	Raffreddamento	Permanenza	Tipo Trattamento	Temperatura	Raffreddamento	Permanenza	Tipo Trattamento	Temperatura	Raffreddamento	Permanenza
Heat-treated and/or Heat-Treated Treated Termis	Temperature Température Temperatur	Abkühlung Cooling Kühlbehandlung	Halbierung Diminution Minderung	Heat-treating Heat Treatment Treated Termis	Temperature Température Temperatur	Abkühlung Cooling Kühlbehandlung	Halbierung Diminution Minderung	Heat-treated and/or Heat-Treated Treated Termis	Temperature Température Temperatur	Abkühlung Cooling Kühlbehandlung	Halbierung Diminution Minderung
Ageing	800°F	AIR	60'								
T: Temperature in degrees, T ₁ Temperature in °F, C: Temperature in degrees Celsius											
TEST	PROVENIA/ PROBABLY Sprossend/ probably Lagerung/ Spalt Mittel/ Clam, D.C. Mittel/ Clam, D.C. Mittel/ Clam, D.C. Mittel/ Clam, D.C.	PROB Fraglich Unklar Unklar	Serviziamento Serviziamento Lavori di stalla Lavori di stalla Rp 0.2%	Serviziamento Serviziamento Lavori di stalla Lavori di stalla Rp 0.2%	Resistenza Resistenza Lavori di stalla Lavori di stalla Rp 0.2%	Alungamento Alungamento Lavori di stalla Lavori di stalla Rp 0.2%	Strizione Strizione Lavori di stalla Lavori di stalla Rp 0.2%	Resistenza Resistenza Lavori di stalla Lavori di stalla Rp 0.2%	Durezza Durezza Lavori di stalla Lavori di stalla Rp 0.2%		
Valori richiesti	min	max	170	-	190	-	10	-	40	-	388
B	12,5	68	L	180	200	16	57	427	444		

Mechanical properties according to ASTM A370.
Delta Ferrite according to AMS 2315.

Analisi chimica

[illegible]

Ultrasonic volumetric test according to ASTM A388: pass.
Micro and macro etch test: satisfactory.
Produced without class I-II Ozone depleting substances.
Macroetch test per ASTM E340: acceptable.
Furnace calibrated according to AMS-H-6875.
Pyrometry in accordance with AMS2750.
Reduction ratio = 103,2 : 1
Material solution annealed 1904°F for 1 h
air cooled to below 90°F.
Material is DFARS Compliant

Sono state soddisfatte tutte le condizioni richieste
Die gestellten Anforderungen sind in Anlage erfüllt
The material has been found shed in accordance with the requirements
Le matériel a été trouvé conforme aux exigences

Controllo antimesciolanza: OK
Verwechslungsprüfung: spackelanalytisch durchgeführt
Antibiotik testing performed: OK
Controllo antimesciolanza: OK

Controllo visivo e dimensionale: soddisfa le esigenze
 Besichtigung und Ausmessung ohne Bezeichnung
 Visual inspection and dimensional check: satisfactory
 Contrôle visuel et dimensionnel: satisfaisant

Vicenza, 23/11/16

VCQD08 - MEST961072

(Mod. MCE2)

Il collaudatore di stabilimento / der Werksachverständige / Works inspector / L'ogent d'usine

M. RIZZOTTO *Kurt*

Pagina - 2 di 3

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL ROUND BAR 17-4 STAINLESS
1.750" DIA X 144.0000"
PART NO.

PO/Rel 37472

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

Signed by:  BL PEC-060379-001

22Aug17

Pg 3/3



Acciaierie Valbruna S.p.A.

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
Telefono 0444.968211 - Fax 0444.963836
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4/37
Telefono 0471.924111 - Fax 0471.924467

CERTIFICATO DI COLLAUDO - ABNAHMEPRUEFZEUGNIS - INSPECTION CERTIFICATE - CERTIFICAT DE RECEPTION

In conformità a: **EN 10204 (2004), 3.1**

Nach/According to/Selon

Certificato nr. **MEST695635 / 2015 / 1**

Prüfung/Tess/Examen

Cliente / Besteller/Purchaser/Client
VALBRUNA CANADA LTD
8724 HOLGATE CRESCENT
L5T 5Z1 - MILTON, ONT L5T 5Z1 - CA

Stato di fornitura: **Hot rolled - COND. A Peeled**
Lieferzustand: **Reeled/Polished**
Delivery status: **Reeled/Polished**
Etat de livraison: **Reeled/Polished**

Produttore:
Hersteller/Hersteller/Usine productrice
ACCIAIERIE VALBRUNA S.P.A.

Ordine nr. **411005034 Stock - Canada**

Bestell
Your order
Commande

Tipo di Elaborazione: **E+AOD**
Erzschmelzungen:
Melting process:
Mode d'élaboration:

Marchi di Fabbrica:
Zeichen des Werks/Marken
Trade marks
Sigles de l'usine productrice



Conferma ordine nr. **EI14011935**

Werk/Our Order/Ref. nr.

Qualità: **630**
Wertklasse/Grade/Qualität

Punzone del Collaudatore:
Stempel des Werksachverständigen
Inspector's stamp/Plaque de l'essayeur

MR

Avviso di Spedizione: **D-VI15014819**
Lieferanweisung/Packing instructions

Marcas: **V174**
Markenbezeichnung
Brand / Nuance

Punzonatura: **630**
Kennzeichnung
Marking
Marquage

Melted and manufactured in Italy No welding or weld repair Material free from Mercury contamination

We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant.

QUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S REGISTER ACCORDING TO ISO 9001 : 2008, ISO/TS16949 : 2009, AS 9100C

The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex 1, s. 4.3 and 2014/68/EU by TÜV and LLOYD'S
Any act of tampering, modification, alteration, counterfeiting and/or falsification and/or any other action which modifies the contents of this test certificate shall constitute a violation of applicable civil and criminal laws. Acciaierie Valbruna shall protect its rights and interests before any competent court, authority and jurisdiction.
Maximal and/or Valplus grades/products are manufactured with ladle techniques to control composition, distribution, size and shape of non-metallic inclusions for improved machinability.

The supplied product conforms to requirements expressly requested by the purchaser and conforms to requirements specified by certified norms and standards. Should the product be used for more severe, critical and/or in any case different applications than those the material is generally intended for, any different and/or supplementary requirements shall be specifically demanded, at least, upon order of the Product by the Purchaser. Acciaierie Valbruna SpA shall not be responsible for any improper use of the Products.

Vicenza, 23/11/16

VC0008 - MEST695635

(Mod. MCEZ)

Il collaudatore di stabilimento / der Werksschwermetalle / Works Inspector / L'agent d'usine

M. RIZZOTTO

Pagina - 3 di 3

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

.125" x .750" X 240.0000"

PART NO.

PO/Rel 37472

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-060379-003

22Aug17

Signed by: 

Pg 1/1

CAN ART

ALUMINUM EXTRUSION L.P.

Material Test Report

Ship To: ThyssenKrupp Materials NA
2821 Langstaff Road
Concord, ON L4K 5C6

Manifest: 322439

Ticket:
5530103

Our Order: 433923 - 1

Cust P.O.: 281574

Die: E805485

Part: 05485-000-240

Alloy Temper: 6061 T6511

Description: 125 x .750

Print Date: 3/28/17

Chemical Composition Range

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	OtherEach	OtherTotal
Min	0.40		0.15		0.8	0.04				
Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15

Mechanical Properties

Strength ksi

Sample ID	Cast #	Lot #	Test Date	Ultimate Tensile	Yield 2% offset	Elongation 2" gage length
426130	<u>3B5358</u>	<u>DAS 5</u> 0-01	3/24/17	40.17	36.91	8.4

Applicable Specifications: ASTM B221-14 AMS-QQ-A200/8A

Country of Origin: 85 Parkshore Drive, Brampton, Ontario CANADA L6T 5M1

Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within agreed upon specifications provided written notification is received by Can Art within 30 days from the date of shipment.

Rahul Tiwari - Tensile Testing

Authorized: _____



Evan Eng, Quality Assurance Manager

THYSSENKRUPP MATERIALS NA

DART AEROSPACE
STAINLESS STEEL ROUND BAR 303 STAINLESS
1.50" DIA X 144.0000"
PART NO.

PO/Rel 37472

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by:

Certificate of Mill Test Results

BL PEC-060379-002

22Aug17
Pg 1/2



North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

METALLURGICAL TEST REPORT

6870 Highway 42 East
Chert, KY 41045-9615
(502) 347-6000

Certificate: 323857 4 Mail To:

Customer: 007206 001 THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6

Ship To:

THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6

Date: 8/16/2017 Page: 1

Steel: 303

Finish: CD

Corrosion:

Your Order: PEC284884

NAS Order: PN 0082890 04

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
UNS 30300, ASTM A582/12 EN 10204 3.1, ASTM A484/16
AMS 5640V TYPE 1-008-7648 CONDITION A
SOLUTION ANNEAL TEMP 1900F MIN, ASTM F899/12b

REMARKS:

COMPLIES W/REQUIREMENTS OF DEPAR 252.225-7009 EU DIRECTIVE
2011/65/EU, ROHS, EAF+AD+CC. NO REPAIR. MELTED AND MFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
------------	--------	----------	------	--------	------------------	------	--------	----------------

BI9021 2			1.7500	1,237	144.00	4	1	
----------	--	--	--------	-------	--------	---	---	--

CHEMICAL ANALYSIS CM(Country of Met) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

UNS Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
479E	DAS	US	.015	.08	17.19	.28	1.98	.31	.050	8.61
		S %	SI %							
		.3260	.27							

MECHANICAL PROPERTIES

Product Id	1 4 0 1 c i	HB NO.	.2YS KSI	UTS KSI	RA %	Elong % AD
BI9021 2	RL	219.0	73.59	100.17	39.24	23.41

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy
of the test methods used, the material meets the specifications stated. These results relate only to the items
tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

8/16/2017

THYSSENKRUPP MATERIALS NA

DART AEROSPACE
STAINLESS STEEL ROUND BAR 303 STAINLESS
750" DIA X 144.0000"
PART NO.

PO/Rel 37472

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by:

BL PEC-060379-002

22Aug17
Pg 2/2



North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

METALLURGICAL TEST REPORT

6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Certificate: 323857 5 Mail To:
Customer: 007206 001 THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6

SHIP TO:
THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6

Date: 8/16/2017 Page: 1
Steel: 303
Finish: CD

Corrosion:

Your Order: PEC284884

NAS Order: PN 0082890 04

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
UNS 30300, ASTM A582/12 EN 10204 3.1, ASTM A484/16
AMS 5640V TYPE 1, QQS-764B CONDITION A
SOLUTION ANNEAL, TEMP 1900F MIN, ASTM F899/12b

REMARKS:

COMPLIES W/REQUIREMENTS OF DPAR 252.225-7009 EU DIRECTIVE
2011/65/EU. ROHS. EAF+AD+CC. NO WELD REPAIR. WELDED AND NFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	Length	Mark	Pieces	Commodity Code
BI9021 4		.7500		1,169	144.00	5	1	

CHEMICAL ANALYSIS CM(Country of Mfg) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323

Chemical Analysis per ASTM A751/14a

NAS Heat	CM	C %	CO %	CR %	CT %	MM %	MO %	N %	NI %	P %
479E	US	.015	.08	17.19	.28	1.98	.31	.050	8.61	.028

S %	SI %
.3260	.27

MECHANICAL PROPERTIES

Product Id	1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	ELONG % 4D
BI9021 4	R L	219.0	73.59	100.17	39.24	23.41

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy
of the test methods used, the material meets the specifications stated. These results relate only to the items
tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

8/16/2017

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M174 R0, 750
 DATE: AUG 22 2017

PO / BATCH NO.: P037472/M139314

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 12'
 QUANTITY INSPECTED: 12'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .750
 THICKNESS RECEIVED: .749
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	N	
CORROSION	Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y	N	4ms 5643
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	N	H7 # 265874
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 5</u> DATE: <u>9-89 AUG 23 2017</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

DAS
5

PURCHASE MATERIAL: 17-4 PH STAINLESS STEEL 630 SS ROUND BAR
PER AMS 5643Y / ASTM A564
GRAIN MUST BE ALONG LENGTH OF BAR
MINIMUM YIELD TENSILE STRENGTH = 100 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI

ASTM A564

SPECIFICATION:

PART NUMBER: M17-4-R1 X.XXX | WHERE X.XXX = DIAMETER (IN INCHES)

O.D.

EG. 3.0" DIAMETER BAR = M17-4-R3 000

RELEASED
R 2010-06-29

B	REFORMAT DWG. S17400TYPE 630 ADDED TO PURCHASE MATERIAL (2N DB-1), ADD A564 SPEC (CS-1). REF PAR 08-020A	VS	10.05.20
A	NEW ISSUE	CP	05.03.16
REV.	DESCRIPTION	BY	DATE
DESIGN	VS		
DRAWN			
CHECKED	VS		
MFG. APPR.	VS		
APPROVED	VS		
DE APPR.	VS		
DATE	10.05.20		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M17-4-R			
TITLE 17-4 SS ROUND BAR			
SCALE NTS			
SHEET 1 OF 1			
NOT TO BE USED FOR ANY PURPOSE OR FOR ANY DESIGN WITHOUT THE SIGNATURE OF THE DESIGNER AND THE APPROVAL OF THE DESIGN ENGINEER			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303 RO, 750
 DATE: AUG 23 2017

PO / BATCH NO.: PO37472/113844

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 48'
 QUANTITY INSPECTED: 48'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .750
 THICKNESS RECEIVED: .749
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	N	45tm 4582
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	47 # 479e
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.
 RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: _____	DAS 5 9-89	SIGNED OFF BY: _____
DATE: <u>AUG 23 2017</u>		DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI-303-SS ROUND BAR
(NOTE: AISI 304/316 NOT ACCEPTABLE)

SPECIFICATION:
PART NUMBER:

ASTM A582
M303R0.750
DIA. 5

DAS

WHERE "D" DIA. = DIAMETER IN INCHES
EG. 0.75" ROUND BAR = M303R0.750

RELEASED
R 2010-02-02
NR

B	REFORMAT DWG. ADD SPECS (ZN D8-1). REF PAR 08-020A	CP	10.01.05
A	NEW ISSUE	DS	01.12.20
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.01.05		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M303R			
SHEET 1 OF 1			
TITLE			
303 ROUND BAR			
SCALE			
NTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD. THIS DOCUMENT IS UNCLASSIFIED AND NOT FOR PUBLICATION WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061H6B.750X.125
 DATE: AUG 23 2017

PO / BATCH NO.: P037472/M138344

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 401
 QUANTITY INSPECTED: 401
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .125
 THICKNESS RECEIVED: .125
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORROSION	Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	4ms QQ4 200
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	HT #3B5368
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u>	<u>5</u>	SIGNED OFF BY: _____
DATE: <u>AUG 23 2017</u>	<u>0-89</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221

B

PART NUMBER: M6061T6B | T.TTT | X | WWW.WWW | 5 | 9-89

THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES
"WWW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED
N 2009-09-03

B	REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (ZN D7-1)	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. M6061T6B REV. B SHEET 1 OF 1 TITLE 6061-T6 BAR SCALE NTS DATE 09.07.13			
COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE UNDERSTANDING THAT IT IS NOT TO BE COPIED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.			

Q U O T A T I O N

No: PEC ST-83832

Quoted By:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 905-738-9033

Quoted To: (20115)
 DART AEROSPACE
 1270 ABERDEEN ST
 HAWKESBURY, ON K6A 1K7

Quoted Ship To: (1)
 DART AEROSPACE
 1270 ABERDEEN ST
 HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS Qtd 18Aug17 Qte Ref
 Frt PREPAID Via FOB
 Tel 613-632-9577 Fax 613-632-1053 Ctc CHANTAL
 Slp STAN IVERS (905-532-1350)

Q U O T A T I O N

QT No: PEC ST-83832

Test Certs: Chem-Y Phys-Y 1 Original copies with Shipment, 1 with Invoice

1 STAINLESS STEEL ROUND BAR 17-4 STAINLESS	1 PCS	18 LBS
.750" DIA X 144.0000"		12 FT
MATERIAL	12 FT @ 7.9000 FT	94.80
ENERGY & CAP SURCHG	25.0000 LOT	25.00
2 STAINLESS STEEL HEX BAR 303 STAINLESS	1 PCS	9 LBS
.50" HEX X 144.0000"		12 FT
MATERIAL	12 FT @ 5.3067 FT	63.68
3 STAINLESS STEEL ROUND BAR 303 STAINLESS	2 PCS	16 LBS
.50" DIA X 144.0000"		24 FT
MATERIAL	24 FT @ 2.3200 FT	55.68
4 STAINLESS STEEL ROUND BAR 303 STAINLESS	1 PCS	12 LBS
.625" DIA X 144.0000"		12 FT
MATERIAL	12 FT @ 4.7500 FT	57.00
5 STAINLESS STEEL ROUND BAR 303 STAINLESS	4 PCS	72 LBS
.750" DIA X 144.0000"		48 FT
MATERIAL	48 FT @ 4.4200 FT	212.16
6 STAINLESS STEEL ROUND BAR 303 STAINLESS	2 PCS	64 LBS
1.00" DIA X 144.0000"		24 FT
MATERIAL	24 FT @ 7.9367 FT	190.48
7 STAINLESS STEEL ROUND BAR 304L	1 PCS	32 LBS
1.00" DIA X 144.0000"		12 FT
MATERIAL	12 FT @ 7.9000 FT	94.80
8 STAINLESS STEEL SHEET 304L-2B DUAL GRADE	1 PCS	160 LBS
.1200 Nom X 48.0000" X 96.0000"		
MATERIAL	1 PCS @ 347.2000 EA	347.20

Q U O T A T I O N

No: PEC ST-83832

Quoted By:

THYSSENKRUPP MATERIALS NA

2821 LANGSTAFF ROAD

CONCORD, ONTARIO L4K 5C6

Tel: 905 669 9444 Fax: 905-738-9033

Quoted To: (20115)

DART AEROSPACE

Quoted Ship To: (1)

DART AEROSPACE

Q U O T A T I O N				QT No: PEC ST-83832
9 STAINLESS STEEL SHEET 304-2B	2 PCS		160 LBS	
.0480 Nom X 48.0000" X 120.0000"				
MATERIAL	2 PCS @	165.0000 EA	330.00	
10 STAINLESS STEEL SHEET 304-2B	2 PCS		200 LBS	
.0600 Nom X 48.0000" X 120.0000"				
MATERIAL	2 PCS @	208.5200 EA	417.04	
11 STAINLESS STEEL SHEET 304-2B	1 PCS		33 LBS	
.0250 Nom X 48.0000" X 96.0000"				
MATERIAL	1 PCS @	138.4300 EA	138.43	
12 ALUMINUM FLAT BAR 6061-T6511	2 PCS		5 LBS	
.125" x .750" X 240.0000"			40 FT	
MATERIAL	40 FT @	1.3750 FT	55.00	
13 ALUMINUM FLAT BAR 6061-T6511	1 PCS		36 LBS	
1.250" x 2.00" X 144.0000"			12 FT	
MATERIAL	12 FT @	8.2500 FT	99.00	
14 ALUMINUM FLAT BAR 6061-T6511	1 PCS		128 LBS	
2.00" x 4.50" X 144.0000"			12 FT	
MATERIAL	12 FT @	26.6667 FT	320.00	
15 ALUMINUM ROUND BAR 6061-T6511	17 PCS		62 LBS	
.562" DIA X 144.0000"			204 FT	
MATERIAL	204 FT @	1.1323 FT	230.99	
16 ALUMINUM ROUND BAR 6061-T6511	1 PCS		6 LBS	
.750" DIA X 144.0000"			12 FT	
MATERIAL	12 FT @	4.5833 FT	55.00	
17 ALUMINUM ROUND BAR 6061-T6511	1 PCS		18 LBS	
1.250" DIA X 144.0000"			12 FT	
MATERIAL	12 FT @	5.5883 FT	67.06	
18 ALUMINUM SHEET 6061 T6	1 PCS		56 LBS	
.1250 Nom X 48.0000" X 96.0000"				
MATERIAL	1 PCS @	183.5600 EA	183.56	
19 ALUMINUM SHEET 2024 -T3	1 PCS		27 LBS	
.0400 Nom X 48.0000" X 144.0000"				
MATERIAL	1 PCS @	237.5000 EA	237.50	
20 ALUMINUM SHEET 2024 -T3	3 PCS		129 LBS	
.0640 Nom X 48.0000" X 144.0000"				

Part No * NO STOCK UNTIL LAYE SEPT **

Q U O T A T I O N

No: PEC ST-83832

Quoted By:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 905-738-9033

Quoted To: (20115)
 DART AEROSPACE

Quoted Ship To: (1)
 DART AEROSPACE

=====

	Q U O T A T I O N	QT No: PEC ST-83832
MATERIAL	129 LBS @	CWT

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
 WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
 TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **
 ** REFERENCED ON IT **

Price in effect at time of shipment.
 Price based on receipt of total order.

All weights are theoretical.
 All orders are subject to credit approval.

**** TEL. 800-926-2600 ****

*** CUSTOMER PICK-UP HOURS ***

*** 9:00 AM TO 4:00 PM ***

* WE STOCK STAINLESS STEEL!!!! * *

* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
 ADDED TO EVERY ORDER.***

*FOR OUR FULL SALES TERMS AND CONDITIONS, PLEASE

*VISIT OUR WEBSITE: www.copperandbrass.com

NO CANCELLATIONS ON PROCESSED MATERIAL.

Order Totals: 20 Items 1243 LBS

Material	Processing	Freight	Other	Taxes	ORDER AMT
3,249.38			25.00	425.68	3,700.06

Taxes: ONHSTS	425.68	0.00	0.00	0.00
---------------	--------	------	------	------

Q U O T A T I O N

No: PEC ST-83833

Quoted By:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

Quoted To: (20115)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Quoted Ship To: (1)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS Qtd 18Aug17 Qte Ref
Frt PREPAID Via FOB
Tel 613-632-9577 Fax 613-632-1053 Ctc CHANTAL
Slp STAN IVERS (905-532-1350)

Q U O T A T I O N

QT No: PEC ST-83833

Test Certs: Chem-Y Phys-Y 1 Original copies with Shipment, 1 with Invoice

1 ALUMINUM PLATE 7075-T651 DOMESTIC 36.1325 ft 3 PCS 109 LBS
1.250" THICK X 2.0000" X 144.5300"

<<<----- SPECIFICATIONS ----->>>

Ga Tol + 0.0000 - 0.0000 Pc/Tag 3
WthTol + 0.1250 - 0.0000 Wt/Skd
LthTol + 0.0000 - 0.0000 Ty Pk
MATERIAL 3 PCS @ 151.0600 EA 453.18 ✓
ENERGY & CAP SURCHG 25.0000 LOT 25.00

2 ALUMINUM PLATE 7075-T651 DOMESTIC 1 PCS 44 LBS
.375" THICK X 8.0000" X 144.5000"
Part No * NO STOCK BAR OR PLATE ***
MATERIAL 44 LBS @ LBS

3 ALUMINUM PLATE 7075-T651 DOMESTIC 15.4164 ft 2 PCS 22 LBS
.750" THICK X 1.2500" X 92.5000"

<<<----- SPECIFICATIONS ----->>>

Ga Tol + 0.0000 - 0.0000 Pc/Tag 2
WthTol + 0.1250 - 0.0000 Wt/Skd
LthTol + 0.0000 - 0.0000 Ty Pk
MATERIAL 2 PCS @ 55.0000 EA 110.00

4 ALUMINUM PLATE 7075-T651 DOMESTIC 22 PCS 4.1666 ft 990 LBS
1.250" THICK X 7.0000" X 50.0000"

<<<----- SPECIFICATIONS ----->>>

Ga Tol + 0.0000 - 0.0000 Pc/Tag 22 92 ft
WthTol + 0.0630 - 0.0000 Wt/Skd 37.0259 ft
LthTol + 0.0630 - 0.0000 Ty Pk
MATERIAL 22 PCS @ 154.8359 EA 3,406.39

5 ALUMINUM PLATE 7075-T651 DOMESTIC 2 PCS 65 LBS
1.50" THICK X 1.5000" X 133.6250" 4.13

<<<----- SPECIFICATIONS ----->>>

Q U O T A T I O N

No: PEC ST-83833

Quoted By:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 905-738-9033

Quoted To: (20115)
 DART AEROSPACE

Quoted Ship To: (1)
 DART AEROSPACE

Q U O T A T I O N					QT No: PEC ST-83833	
Ga Tol +	0.0000	-	0.0000	Pc/Tag	2	
WthTol +	0.1250	-	0.0000	Wt/Skd		
LthTol +	0.0000	-	0.0000	Ty	Pk	
MATERIAL				2 PCS @	144.4400 EA	288.88
<hr/>						
6	ALUMINUM PLATE 7075-T651 DOMESTIC				3 PCS	152 LBS
1.750" THICK X 2.2500" X 122.5000"						
<<<----- SPECIFICATIONS ----->>>						
Ga Tol +	0.0000	-	0.0000	Pc/Tag	3	
WthTol +	0.1250	-	0.0000	Wt/Skd		
LthTol +	0.0000	-	0.0000	Ty	Pk	
MATERIAL				3 PCS @	321.5233 EA	964.57
<hr/>						
7	ALUMINUM PLATE 7075-T651 DOMESTIC				4 PCS	305 LBS
1.00" THICK X 5.0000" X 147.5000"						
<<<----- SPECIFICATIONS ----->>>						
Ga Tol +	0.0000	-	0.0000	Pc/Tag	4	
WthTol +	0.1250	-	0.0000	Wt/Skd		
LthTol +	0.0000	-	0.0000	Ty	Pk	
MATERIAL				4 PCS @	295.1550 EA	1,180.62

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
 WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
 TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **

** REFERENCED ON IT **

Price in effect at time of shipment.

Price based on receipt of total order.

All weights are theoretical.

All orders are subject to credit approval.

**** TEL. 800-926-2600 ****

*** CUSTOMER PICK-UP HOURS ***

*** 9:00 AM TO 4:00 PM ***

* WE STOCK STAINLESS STEEL!!!! *
 * PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE

ADDED TO EVERY ORDER.***

*FOR OUR FULL SALES TERMS AND CONDITIONS, PLEASE

*VISIT OUR WEBSITE: www.copperandbrass.com

NO CANCELLATIONS ON PROCESSED MATERIAL.

Q U O T A T I O N

No: PEC ST-83833

Quoted By:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 905-738-9033

Quoted To: (20115)
 DART AEROSPACE

Quoted Ship To: (1)
 DART AEROSPACE

=====

Q U O T A T I O N	QT No: PEC ST-83833

Order Totals:				7 Items	1687 LBS

Material	Processing	Freight	Other	Taxes	ORDER AMT
6,403.64			25.00	835.71	7,264.35

Taxes: ONHSTS	835.71	0.00		0.00	0.00

21Aug17 12:53 S A L E S A C K N O W L E D G M E N T No: PEC ST-84421

Sold By:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

Ship From:
THYSSENKRUPP MATERIAUX NA
4700 BOIS FRANC
ST. LAURENT, QC H4S 1A7

Sold To: (20115)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Ship To: (1)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS
Frt PREPAID
Con 96294
Slp STAN IVERS (905-532-1350)

Ord 21Aug17 Due22Aug17
Via VIM DELIVERY FOB CONCORD
PO/Rel 37472
Tel 613-632-9577 Fax 613-632-1053

=====

S A L E S A C K N O W L E D G M E N T SO No PEC ST-84421

Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice

1 STAINLESS STEEL ROUND BAR 17-4 STAINLESS	1 PCS	18 LBS
.750" DIA X 144.0000"		12 FT
MATERIAL	12 FT @ 7.9000 FT	94.80
ENERGY & CAP SURCHG	25.0000 LOT	25.00

2 STAINLESS STEEL ROUND BAR 303 STAINLESS	4 PCS	72 LBS
.750" DIA X 144.0000"		48 FT
MATERIAL	48 FT @ 4.4200 FT	212.16

3 ALUMINUM FLAT BAR 6061-T6511	2 PCS	5 LBS
.125" x .750" X 240.0000"		40 FT
MATERIAL	40 FT @ 1.3750 FT	55.00

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **

** REFERENCED ON IT **

** CUSTOMER PICK-UP HRS / 9:00 AM TO 4:00 PM **

*** TEL. 800-926-2600 ***

* WE STOCK STAINLESS STEEL!!!! *

* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
ADDED TO EVERY ORDER.***

*FOR OUR FULL SALES TERMS AND CONDITIONS, PLEASE

*VISIT OUR WEBSITE: www.copperandbrass.com

NO CANCELLATIONS ON PROCESSED MATERIAL.

Order Totals:		3 Items	95 LBS
Material	Processing	Freight	Other
		Taxes	ORDER AMT

Page: 1Continued

Sold By:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 905 669 9445

Ship From:
THYSSENKRUPP MATERIAUX NA
4700 BOIS FRANC
ST. LAURENT, QC H4S 1A7

Ship To: (1)
DART AEROSPACE

S A L E S A C K N O W L E D G M E N T SO No PEC ST-84421			
Test Certs: Chem Y Phys Y	1 Original copies with Shipment,	1 with Invoice	
361.96	25.00	50.30	437.26

Taxes: ONHSTS 50.30

21Aug17 15:04 S A L E S A C K N O W L E D G M E N T No: PEC ST-84556

Sold By:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

Sold To: (20115)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Ship To: (1)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS Ord 21Aug17 Due23Aug17
Frt PREPAID Via O/T FOB CONCORD
Con 96294 PO/Rel 37472
Slp STAN IVERS (905-532-1350) Tel 613-632-9577 Fax 613-632-1053

=====

S A L E S A C K N O W L E D G M E N T SO No PEC ST-84556

Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice

1 ALUMINUM PLATE 7075-T651 DOMESTIC 22 PCS 990 LBS
1.250" THICK X 7.0000" X 50.0000"

<<<----- SPECIFICATIONS ----->>>

Ga Tol + 0.0000 - 0.0000 Pc/Tag 22
WthTol + 0.0630 - 0.0000 Wt/Skd
LthTol + 0.0630 - 0.0000 Ty Pk
MATERIAL 22 PCS @ 154.8359 EA 3,406.39

2 ALUMINUM FLAT BAR 6061-T6511 1 PCS 128 LBS
2.00" x 4.50" X 144.0000"
MATERIAL 12 FT @ 26.6700 FT 320.04

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **

** REFERENCED ON IT **

** CUSTOMER PICK-UP HRS / 9:00 AM TO 4:00 PM **

*** TEL. 800-926-2600 ***

* WE STOCK STAINLESS STEEL!!!! *

* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
ADDED TO EVERY ORDER.***

*FOR OUR FULL SALES TERMS AND CONDITIONS, PLEASE

*VISIT OUR WEBSITE: www.copperandbrass.com

NO CANCELLATIONS ON PROCESSED MATERIAL.

Order Totals: 2 Items 1,118 LBS

Material	Processing	Freight	Other	Taxes	ORDER AMT
3,726.43				484.44	4,210.87

21Aug17 15:04 S A L E S A C K N O W L E D G M E N T No: PEC ST-84556
Sold By:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

Sold To: (20115)
DART AEROSPACE

Ship To: (1)
DART AEROSPACE

=====

S A L E S A C K N O W L E D G M E N T	SO No PEC ST-84556
---	--------------------

Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice

Taxes: ONHSTS 484.44



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO37472

Purchase Order Date 8/18/2017

PO Print Date 8/18/2017

Page Number 1 of 4

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED
AUG 21 2017

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Customer POID	
		Customer Tax #	10127-2607
Ship To Contact		Terms	Net 30
Ship To Phone		Currency	CAD
Ship Via:	VENDOR'S TRUCK	FOB	FCA - (Free Carrier)
Ship Acct:			

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	M174R0.750	17-4 round bar .750	8/31/2017 Yes 8/31/2017		12.00 f	\$7.95	\$95.40
17-4PH/S17400/TYPE 630 SS ROUND BAR PER AMS 5643/ASTM A564 GRAIN MUST BE ALONG LENGTH OF BAR. MINIMUM YIELD TENSILE STRENGTH = 100KSI MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI							

Line Total: \$95.40

2	M303R0.750	303 Round Bar 0.750	8/31/2017 Yes 8/31/2017		48.00 f	\$4.42	\$212.16
---	------------	---------------------	-------------------------------	--	------------	--------	----------

MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582

NOTE: AISI 304/316 NOT ACCEPTABLE

SEP 17-8-23.

Line Total: \$212.16

PO Instructions: no pec st-83832 and st-83833

Note:

8/18/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO37472

Purchase Order Date 8/18/2017

PO Print Date 8/18/2017

Page Number 2 of 4

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905 669 9444

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

3	M6061T6B00750X00.125	6061-T6 Bar .750 x .125	8/31/2017	40.00	\$1.38	\$55.00
			Yes	f		
			8/31/2017			

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

887-8-23

Line Total: \$55.00

4	M6061T6B2.000X04.500	6061T6 Bar 2.00 x 4.500 (cut to 5.00 OR 5.625 +.030"/-.000)	8/31/2017	12.00	\$26.67	\$320.00
			Yes	f		
			8/31/2017			

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

Line Total: \$320.00

PO Instructions: no pec st-83832 and st-83833

Note:

8/18/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37472**

Purchase Order Date 8/18/2017

PO Print Date 8/18/2017

Page Number 3 of 4

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Customer POID	
Ship To Contact		Customer Tax #	10127-2607
Ship To Phone		Terms	Net 30
Ship Via:	VENDOR'S TRUCK	Currency	CAD
Ship Acct:		FOB	FCA – (Free Carrier)

5	M7075T6S1.250X2.000	7075-T6 SHEET 1.250" X 2.000"	8/31/2017	36.13	\$12.59	\$454.84
		Yes		f		
		8/31/2017				

MAT'L 7075-T6/T62 ALUMINUM SHEET
SPECS QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR PER ASTM B209

MAT'L 7075-T6/T62 ALCLAD ALUMINUM SHEET
SPECS QQ-A-250/13 OR AMS-QQ-A-250/13 OR AMS 4049 OR PER ASTM B209

Line Total: \$454.84

6	M7075T6S0.750X1.250	M7075T6S0.750X1.250	8/31/2017	15.42	\$7.14	\$110.00
		Yes		f		
		8/31/2017				

MAT'L 7075-T6/T62 ALUMINUM SHEET
SPECS QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR PER ASTM B209

MAT'L 7075-T6/T62 ALCLAD ALUMINUM SHEET
SPECS QQ-A-250/13 OR AMS-QQ-A-250/13 OR AMS 4049 OR PER ASTM B209

Line Total: \$110.00

PO Instructions: no pec st-83832 and st-83833

Note:

8/18/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37472**

Purchase Order Date 8/18/2017

PO Print Date 8/18/2017

Page Number 4 of 4

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Customer POID	
Ship To Contact		Customer Tax #	10127-2607
Ship To Phone		Terms	Net 30
Ship Via:	VENDOR'S TRUCK	Currency	CAD
Ship Acct:		FOB	FCA - (Free Carrier)

7	M7075T6S1.250X7.000	7075-T6 SHEET 1.25" X 7.000" ORDER PRE CUT TO 50.00"	8/31/2017	92.00	\$37.03	\$3,406.38
---	---------------------	--	-----------	-------	---------	------------

Yes f

NOTE 22 PCS COT AT 50" LONG 8/31/2017
MAT'L 7075-T6/T62 ALUMINUM SHEET
SPECS QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR PER ASTM B209

MAT'L 7075-T6/T62 ALCLAD ALUMINUM SHEET
SPECS QQ-A-250/13 OR AMS-QQ-A-250/13 OR AMS 4049 OR PER ASTM B209

Line Total: \$3,406.38

8	71401-45	PROCUREMENT QUALITY CLAUSES	8/31/2017	1.00	\$0.00	\$0.00
---	----------	--------------------------------	-----------	------	--------	--------

No

Procurement Quality Clauses 8/31/2017
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

Line Total: \$0.00

PO Total: \$4,653.78

PO Instructions: no pec st-83832 and st-83833

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 8/18/2017